

*WHAT IS ACCELERATION?*

* Acceleration is the rate of change of . (When a car accelerates, it speeds up. When a car decelerates, it slows .)
* Acceleration Rule

## Acceleration = (Final velocity - Initial velocity) / Time

a = ( v2 – v1 ) / t

* Earth’s Gravitational Acceleration (g) is the acceleration of an object as it to earth at m/s2

This means that an object that falls starts at 0m/s, and then every second, its speed by 9.8m/s.

*Questions - Acceleration*

1. A car accelerates from 20 m/s to 40 m/s in 5 seconds. What is its acceleration?
2. A motorbike speeds up from a standing start (that is, 0 m/s) to 30 m/s in 4 seconds. How fast is its acceleration?
3. When she sees the red traffic light, Marie brakes to a halt from a speed of 70 metres per second in just 2 seconds. What is her deceleration?
4. A skydiver falling from an aircraft falls at 9.8 m/s2. What is his speed after 3 seconds?

Answers – Acceleration

1. 4 m/s2 2. 7.5 m/s2 3. 35 m/s2 4. 29.4 m/s

